

Eucactophagus biocellatus n. sp. (Pl. 4, fig. 5.)

Type:—Cat. No. 21069, U. S. N. M.

Very similar to *E. aurocinctus* Champ. but conspicuously different in that the yellow area occupies the basal three-fourths of the elytra except the humerus and encloses a piceous macula occupying third, fourth and fifth interstices just before middle of elytra. The stria punctures are more deeply impressed and the interstices more convex than in *aurocinctus*. The first stria is arcuate basally and joins the second stria beside the scutellum. The third interstice is twice as wide at base as the fourth, the seventh interstice but little more than half as wide throughout its length as the others. The antennal scape is stouter basally and less swollen apically, and is feebly arcuate in basal half. Length 10 mm., width 4.8 mm.

Described from a single specimen received about 1912 from F. H. Jackson at Las Cascades, Canal Zone, Panama. The black discal elytral spots occupy part of the area occupied by the yellow fascia in the cotype of *aurocinctus* illustrated by Champion which is before me (U. S. Nat. Mus. Cotype No. 21070), so it is improbable that it might be merely a form of that species with the yellow fascia more extended.

EXPLANATION OF PLATE IV.

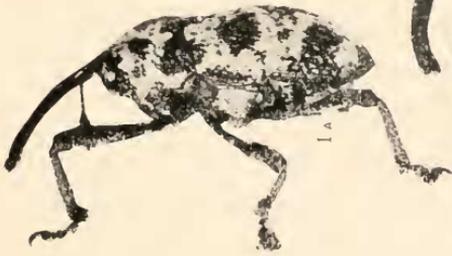
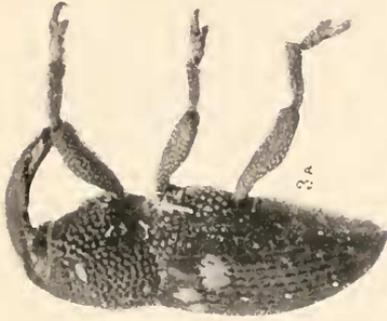
- 1, 1A, 1B. *Cholus forbesii* Pascoc.
2. *Cholus catteleyae* Champ. Abnormal specimen (perhaps hybrid) in collection of Amer. Mus. Nat. Hist., displaying thoracic vestiture as in *C. forbesii*. For normal coloration see plate facing p. 178, Proc. Ent. Soc. Wash. 1916.
- 3, 3A. *Acythopeus gilvonotatus* n. sp. Type. (Photo. by Paine.)
4. *Eucactophagus weissii* n. sp. Type.
- 4A, 4B. “ “ Largest paratype. (Dark lines on abdomen and metasternum of 4B are shadows of legs.)
5. *Eucactophagus biocellatus* n. sp. Type.

THREE NEW TACHINID PARASITES OF ELEODES.

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The three forms described below constitute an addition to our knowledge of the dipterous parasites of the imagines in Coleoptera. Two of them represent a well marked genus, apparently new to science. The remaining form is a true *Biomysia*, a genus already known as being parasitic on adult beetles. The American species



known to have this habit are *Biomyia georgiae* B. and B., and *B. lachnosternae* Town., *Euhaliidaya* (*Biomyia*) *genalis* Coq., described by me as *E. severinii*, and parasitic on *Diapheromera* (Orthoptera) is of course not a *Biomyia* in any sense but represents, in my opinion, a valid genus very close to *Haliidaya* of Egger.

Eleodiphaga new genus.

Moderately robust, head (pl. 5, fig. 1) large, wider than thorax, distinctly conical, much thicker at insertion of antennae than at vibrissae. Wings rather short, legs robust.

Front abruptly produced, antennae inserted distinctly above the middle of eye, face sloping downward in a gentle convex curve to vibrissae which are inserted slightly below the oral margin. Cheeks equal in width to at least two-thirds height of eye. Front at vertex nearly twice as wide as eye, the vitta occupying one-third or more of its width. The frontalia thickly sprinkled with macrochaetae. Parafacials more than half as wide as facial depression, their lower half plentifully sprinkled with irregularly arranged bristles. Facial depression deep, its sides almost parallel, carina nearly obsolete. Fascialia bearing bristles on approximately the lower two-thirds. Antennae, in the male, very long, first two segments elevated above the level of the front, third segment slightly longer than the face, its long sides nearly parallel, at least six times longer than broad and of a velvety texture. Arista inserted at extreme base of third segment and thickened to its tip, second joint only slightly longer than broad. Vibrissae short, rather weak, not decussate, and directed downward. "Transverse depression" of face not transverse but running almost vertically from corner of eye to oral margin, the cheeks proper merging immediately with inferior occipital surface. Eyes absolutely bare, small and oval in shape. Frontal macrochaetae arranged in two rows, the upper ones not noticeably stronger than the lower, descending well below insertion of arista. No true orbitals present in male. Ocellar bristles well developed and widely divergent but directed forward. Ocellar triangle unusually large. Proboscis very short, fleshy; palpi, normal. Wings (pl. 5, fig. 2) with the apical cell long-petiolate, ending in the costa, well before tip of wing, the petiole about twice as long as small crossvein. Costal spine obsolescent but distinguishable. All veins bare excepting base of the third which bears two or three ordinary bristles. Front claws of male not elongated, the hind tibiae coarsely pectinate but not ciliate, with coarse bristles. The tarsi all rather small and weak.

This genus seems to be related to both *Phasmophaga*, Town., and *Hyperceteina* (Admontia) Schiner.

Type of the genus, *E. caffreyi* new species.

***Eleodiphaga caffreyi* new species.**

Length 9 mm. male. Black, subshining; wings milky, nearly opaque; veins black. Front, face, cheeks and occiput black, thinly pruinose, with grayish pollen. Vitta brownish. Antennae and arista black, palpi reddish. Postocellar pair of macrochaetae present. Thorax black, thinly grayish pollinose, two pairs of indistinct vittae present, postsutural dorso-central bristles three, sternopleurals four or more, pleurae black, thinly whitish pruinose. Scutellum black, bearing three pairs of marginals and an apical pair. Abdomen ovate, conical, black, shining, entirely destitute of pollen or spots. Median discal and marginal macrochaetae on all segments excepting the first which bears neither. Venter black, hypopygium retracted but visible, shining black. Middle tibiae bearing one weak and two strong macrochaetae on front side toward the middle. Legs black including coxae, squamae opaque white.

Described from two male specimens, one reared from material collected by D. J. Caffrey of the U. S. Bureau of Entomology, at Maxwell, New Mexico, (elevation 6,500 feet) and in honor of whom the species is named. The specimen emerged from an adult of *Eleodes extricata* Say. The other specimen was reared from material collected by V. L. Wildermuth, at Prescott, Arizona, and emerged from an adult of *Eleodes obsoleta*, Say.

***Eleodiphaga pollinosa* new species.**

Length 9 mm. Similar structurally to the foregoing species, differing as follows: slightly more robust, the front (pl. 5, figs. 3-4) produced not quite so much, eyes longer, antennae somewhat more slender, arista a little shorter. The palpi yellow and rather small. First two joints of antennae yellowish red, third joint brownish, entire head more thickly pollinose. Thorax and scutellum opaque, whitish pollinose, five dorsal vittae plainly visible, the middle one obsolete cephalad of the transverse suture.

Dorsocentral macrochaetae four, acrostichals strong and in four pairs, sternopleurals four or more. Abdomen robust, ovate, first three segments black, the basal two-thirds silvery pollinose, the margins shining, fourth segment orange yellow, thinly silvery pollinose at base. First segment without median macrochaetae, the intermediate segments with weak discals and marginals, fourth segment bearing only weak bristles on its disc and the marginals also rather weak. Legs black, claws short, hind tibiae subciliate, middle tibiae bearing a single macrochaeta on front side near the middle. Wings milky hyaline, veins blackish, third vein bearing three weak bristles at its base. Tip of both wings broken off in holotype about opposite the hind crossvein, remains of wings very similar to *E. caffreyi*

Described from a single male specimen reared from an adult of *Eleodes hispilabrus* Say, collected at Maxwell, New Mexico, by D. J. Caffrey.